

Statistical and Low Temperature Physics (PHYS393)

About the module

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University of Liverpool

Recommended textbooks

1. Statistical Mechanics - A Survival Guide,
A. M. Glazer and J. S. Wark
Oxford University Press, 2001
2. Basic Superfluids
Tony Guenault
Taylor & Francis Inc., 2003

Both are available as ebooks in the Liverpool University library.

Contents for the module

0. About the module
1. Basic statistical mechanics
2. Ideal gas
3. Electrons in metals
4. Photons and phonons
5. Dilution refrigerator
6. Magnetic refrigerator
7. Superfluids
8. Superconductors

Online materials

My teaching webpage:

<http://hep.ph.liv.ac.uk/~hock/Teaching/Teaching.html>

Assessment for this module consists of:

90% Exam

10% Continual

Late Submission:

- Each assignment is marked out of 20. ONE (1) mark is deducted for for each working day after deadline.
- Work assessed below the pass mark (40%, or 8 marks) will not be penalised for late submission of up to five days.
- Work received more than FIVE (5) working days after the submission deadline will receive a mark of zero.
- Re-take for this assessment will follow the rule for resit of the exam.

There will be FOUR (4) tutorials assignments, and four tutorial sessions during the semester.

The deadline for an assignment will be 5 working days before the tutorial session.

Tutorial sheets will be given out at the lectures, and will also be available online:

<http://hep.ph.liv.ac.uk/~hock/Teaching/Teaching.html>

Anonymous marking: Fill in the cover sheet provided, fold top right-hand corner over your name and attach the cover sheet to your answer script.

The assignments should be handed in to the Student Office at the physics department.

- The exam carries 90% of the total assessment.
- It is normally held in January.
- Resit will be in January in the following year.
- For PGT students, resit in August is possible.